

Exhibit E-37 Summary of Oakland Operations Office End States

Site Name	End State Description
Energy Technology Engineering Center	Environmental Management is responsible for remediation. Remediation will be complete by FY 2006, and the site will be turned over to Boeing North American. All wastes are being shipped off site. End state use will probably be industrial.
General Atomics	The site is expected to be fully remediated by FY 2000. The Hot Cell Facility will be decontaminated and decommissioned, and the site will be released as NRC no-rad restriction. Soil cleanup limits are based on an industrial land use. All wastes are being shipped off site, some to INEEL. DOE maintains liability at the site until all of the waste is off of the site.
General Electric Vallecitos Nuclear Center	Remediation of this site is expected to be complete by 2005, at which time DOE will have no further obligations to General Electric. The hot cell will be turned over to GE, who plans on using it commercially, though a portion of the site will be zoned industrial.
Geothermal Test Facility	The site was completed in the first quarter of FY 1997, and was turned over to the Bureau of Land Management in 1997 for unrestricted use. The brine pond waste material was removed and disposed of off site. No long-term monitoring, surveillance, or maintenance is required. A NEPA categorical exclusion was issued in accordance with 10 CFR 1021, Appendix B 6.1.
Laboratory for Energy-Related Health Research	Site cleanup will be complete by 2002. Closure of the RCRA storage facility is expected to end by FY 2001. UC-Davis is responsible for a radioactive waste burial trench and three landfills that are on site. Post-closure monitoring will primarily be the responsibility of UC-Davis. The four buildings that DOE is responsible for will be released for unrestricted use. All waste will be shipped off site.
Lawrence Berkeley National Laboratory	LBNL has an ongoing mission with continued generation of hazardous, mixed, and radioactive wastes. A groundwater treatment system is expected to be in place by 2003. Clean closure of the Hazardous Waste Handling Facility (HWHF) will be completed in FY 1998, and a new HWHF was constructed in FY 1997. No soil remediation of the HWHF is expected. Currently, no definitive cleanup level has been established for tritium in groundwater.

Exhibit E-37 (Continued)

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Site Name	End State Description
Lawrence Livermore National Laboratory - Main Site	LLNL expects to continue to occupy and conduct research at the Main Site indefinitely. Future land use is expected to be industrial. VOCs have contaminated groundwater sources on and off site. Remediation of the soil and groundwater is in progress. By 2006, all of the soil and groundwater treatment facilities will be operating. No solid waste disposal will occur on site. DOE will continue to own and manage the site.
Lawrence Livermore National Laboratory - Site 300	LLNL expects to continue to occupy and conduct research at Site 300 indefinitely. Groundwater treatment systems will be in place and operational by FY 2006. Access will continue to be controlled. The land will continue to be a mix of industrial and wildlife areas. No solid waste disposal will occur on site.
Separations Process Research Unit	All radiological and hazardous contamination (LLW, MLLW, TRU, MTRU, HLW) will be disposed of off site. The majority of cleanup activities will occur between 2006 and 2014. The area is expected to be released for unrestricted use by the owner, Knolls Atomic Power Laboratory.
Stanford Linear Accelerator Center	This site has an ongoing mission as an active research facility. Cleanup of the contaminated areas will be completed by Environmental Restoration and the site returned to the Office of Energy Research by 2000. A network of wells has been installed to monitor groundwater contamination. Long-term monitoring responsibilities will be transferred to the site landlord, the Office of Energy Research. Contaminants will remain in the soil at depths of 10 to 20 feet near the Former Solvent Underground Storage Tank Area.

E.7.2 Cost and Completion Dates

Oakland Operations Office has divided its EM work into 21 discrete projects. A Project Baseline Summary (PBS) exists for each project and contains detailed programmatic information, including cost, schedule, scope, end state, and interim milestones. A summary of the Oakland cost and schedule information is illustrated in Exhibit E-38. For additional information about these projects, refer to the individual PBSs.

The estimated life-cycle cost of Oakland Operations Office environmental management work scope is \$1.0 billion (constant 1998 dollars). This estimate does not include approximately \$1.1 billion (constant 1998 dollars) in costs associated with the generation of new wastes that are expected to be the responsibility of the generator.



Exhibit E-38 Oakland Operations Office Cleanup Project Summary: Duration and Costs (All costs in thousands of 1998 dollars)

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Total		5,335			63,300	38,385	127,607	11,477		20.650				1,335				4,272	17,727			1,136			53,038	
2007 - 2070		1,933			47,312	0	0	0		C				0				0	0			0			27,684	
1997 - 2006		3,402			15,989	38,385	127,607	11,477		20.650				1,335				4,272	17,727			1,136			25,3545	
Site Closure Project Activities	Oakland Operations Office	State Grants	Environmental Technology	Engineering Center (ETEC)	ETEC Landlord	ETEC Waste Management	ETEC Remediation	General Atomics Hot Cell Facility Deactivation and	Decommissioning at General	General Electric General Electric Deactivation and	Decommissioning	(Environmental Restoration)	Geothermal Test Facility	Soil Remediation at the	Geothermal Test Facility	Laboratory for Energy Related	Health Research (LEHR)	LEHR Waste Management	LEHR Environmental Restoration	Lawrence Berkelev National	Laboratory (LBNL)	LBNL Hazardous Waste Handling	Facility Closure	(Environmental Restoration)	LBNL Soils and Groundwater	(Environmental Restoration)